Amendments to the Claims

This listing of claims replaces all prior versions and listings of claims in the application.

Listing of Claims

1-42. (Canceled)

43. (Currently Amended) A liquid crystal display device comprising:

a first substrate and a second substrate opposed to the first substrate;

a thin film transistor formed over the first substrate; and

a liquid crystal layer interposed between the first substrate and the second substrate,

wherein long axes of liquid crystal molecules in the liquid crystal layer are kept parallel with a surface of the first substrate both when driving the liquid crystal display device using the thin film transistor and when not using the thin film transistor to drive the liquid crystal display device, and

wherein a transparent conductive material is formed over the second substrate.

44. (Original) A liquid crystal display device according to claim 43 wherein the first and the second substrates comprise a glass or a quartz substrate.

45. (Original) A liquid crystal display device according to claim 43 wherein the thin film transistor comprises an amorphous silicon.

46. (Original) A liquid crystal display device according to claim 43 wherein the transparent conductive material functions as an electrode.

47. (Currently Amended) A liquid crystal display device comprising:

a first substrate and a second substrate opposed to the first substrate;

a thin film transistor formed over the first substrate; and

a liquid crystal layer interposed between the first substrate and the second substrate,

wherein long axes of liquid crystal molecules in the liquid crystal layer are kept parallel with a surface of the first substrate both when driving the liquid crystal display device using the thin film transistor and when not using the thin film transistor to drive the liquid crystal display device, and

wherein a transparent conductive material is formed over an entire surface of the second substrate.

48. (Original) A liquid crystal display device according to claim 47 wherein the first and the second substrates comprise a glass or a quartz substrate.

49. (Original) A liquid crystal display device according to claim 47 wherein the thin film transistor comprises an amorphous silicon.

50. (Original) A liquid crystal display device according to claim 47 wherein the transparent conductive material functions as an electrode.

51. (Currently Amended) A liquid crystal display device comprising:

a first substrate and a second substrate opposed to the first substrate;

a thin film transistor formed over the first substrate; and

wherein long axes of liquid crystal molecules in the liquid crystal layer are kept parallel with a surface of the first substrate both when driving the liquid crystal display device using the thin film transistor and when not using the thin film transistor to drive the liquid crystal display device, and

wherein a transparent conductive material comprising ITO is formed over the second substrate.

52. (Original) A liquid crystal display device according to claim 51 wherein the first and the second substrates comprise a glass or a quartz substrate.

53. (Original) A liquid crystal display device according to claim 51 wherein the thin film transistor comprises an amorphous silicon.

54. (Original) A liquid crystal display device according to claim 51 wherein the transparent conductive material functions as an electrode.

55. (Currently Amended) A liquid crystal display device comprising:

a first substrate and a second substrate opposed to the first substrate;

a thin film transistor formed over the first substrate; and

a liquid crystal layer interposed between the first substrate and the second substrate,

wherein long axes of liquid crystal molecules in the liquid crystal layer are kept parallel with a surface of the first substrate both when driving the liquid crystal display device using the thin film transistor and when not using the thin film transistor to drive the liquid crystal display device, and

wherein a transparent conductive material comprising ITO is formed over an entire surface of the second substrate.

56. (Original) A liquid crystal display device according to claim 55 wherein the first and the second substrates comprise a glass or a quartz substrate.

57. (Original) A liquid crystal display device according to claim 55 wherein the thin film transistor comprises an amorphous silicon.

58. (Original) A liquid crystal display device according to claim 55 wherein the transparent conductive material functions as an electrode.

59. (Currently Amended) A liquid crystal display device comprising:

a first substrate and a second substrate opposed to the first substrate;

a thin film transistor formed over the first substrate; and

a liquid crystal layer interposed between the first substrate and the second substrate,

wherein long axes of liquid crystal molecules in the liquid crystal layer are kept parallel with a surface of the first substrate both when driving the liquid crystal display device using the thin film transistor and when not using the thin film transistor to drive the liquid crystal display device,

wherein a transparent conductive material is formed over the second substrate, and

wherein a black matrix comprising a resin material is formed adjacent to the second substrate.

60. (Previously Presented) A liquid crystal display device according to claim 59 wherein the first and the second substrates comprise a glass or a quartz substrate.

61. (Previously Presented) A liquid crystal display device according to claim 59 wherein the thin film transistor comprises an amorphous silicon.

62. (Previously Presented) A liquid crystal display device according to claim 59 wherein the transparent conductive material functions as an electrode.

63. (Previously Presented) A liquid crystal display device according to claim 59 wherein the black matrix contains a black pigment.

64. (Currently Amended) A liquid crystal display device comprising:

a first substrate and a second substrate opposed to the first substrate;

a thin film transistor formed over the first substrate; and

a liquid crystal layer interposed between the first substrate and the second substrate,

wherein long axes of liquid crystal molecules in the liquid crystal layer are kept parallel with a surface of the first substrate both when driving the liquid crystal display device using the thin film transistor and when not using the thin film transistor to drive the liquid crystal display device,

wherein a transparent conductive material is formed over an entire surface of the second substrate, and

wherein a black matrix comprising a resin material is formed adjacent to the second substrate.

65. (Previously Presented) A liquid crystal display device according to claim 64 wherein the first and the second substrates comprise a glass or a quartz substrate.

66. (Previously Presented) A liquid crystal display device according to claim 64 wherein the thin film transistor comprises an amorphous silicon.

67. (Previously Presented) A liquid crystal display device according to claim 64 wherein the transparent conductive material functions as an electrode.

68. (Previously Presented) A liquid crystal display device according to claim 64 wherein the black matrix contains a black pigment.

69. (Currently Amended) A liquid crystal display device comprising:

a first substrate and a second substrate opposed to the first substrate;

a thin film transistor formed over the first substrate; and

a liquid crystal layer interposed between the first substrate and the second substrate,

wherein long axes of liquid crystal molecules in the liquid crystal layer are kept parallel with a surface of the first substrate both when driving the liquid crystal display device using the

thin film transistor and when not using the thin film transistor to drive the liquid crystal display device,

wherein a transparent conductive material comprising ITO is formed over the second substrate, and

wherein a black matrix comprising a resin material is formed adjacent to the second substrate.

70. (Previously Presented) A liquid crystal display device according to claim 69 wherein the first and the second substrates comprise a glass or a quartz substrate.

71. (Previously Presented) A liquid crystal display device according to claim 69 wherein the thin film transistor comprises an amorphous silicon.

72. (Previously Presented) A liquid crystal display device according to claim 69 wherein the transparent conductive material functions as an electrode.

73. (Previously Presented) A liquid crystal display device according to claim 69 wherein the black matrix contains a black pigment.

74. (Currently Amended) A liquid crystal display device comprising:

a first substrate and a second substrate opposed to the first substrate;

a thin film transistor formed over the first substrate; and

a liquid crystal layer interposed between the first substrate and the second substrate,

wherein long axes of liquid crystal molecules in the liquid crystal layer are kept parallel with a surface of the first substrate both when driving the liquid crystal display device using the thin film transistor and when not using the thin film transistor to drive the liquid crystal display device,

wherein a transparent conductive material comprising ITO is formed over an entire surface of the second substrate, and

wherein a black matrix comprising a resin material is formed adjacent to the second substrate.

75. (Previously Presented) A liquid crystal display device according to claim 74 wherein the first and the second substrates comprise a glass or a quartz substrate.

76. (Previously Presented) A liquid crystal display device according to claim 74 wherein the thin film transistor comprises an amorphous silicon.

77. (Previously Presented) A liquid crystal display device according to claim 74 wherein the transparent conductive material functions as an electrode.

78. (Previously Presented) A liquid crystal display device according to claim 74 wherein the black matrix contains a black pigment.

79. (Currently Amended) A liquid crystal display device comprising:

a thin film transistor over a substrate, wherein the thin film transistor includes at least a gate electrode, a semiconductor film adjacent to the gate electrode, and an electrode electrically connected to the semiconductor film;

a common electrode over the substrate;

a liquid crystal layer over the thin film transistor and the common electrode; and

a transparent conductive material over the liquid crystal layer, wherein the liquid crystal layer is located between the substrate and the transparent conductive material, and

wherein long axes of liquid crystal molecules in the liquid crystal layer are kept parallel with a surface of the substrate both when driving the liquid crystal display device using the thin

film transistor and when not using the thin film transistor to drive the liquid crystal display device.

80. (Previously Presented) A liquid crystal display device according to claim 79 wherein the substrate comprises a glass or a quartz substrate.

81. (Previously Presented) A liquid crystal display device according to claim 79 wherein the transparent conductive material functions as an electrode.

82. (Previously Presented) A liquid crystal display device according to claim 79 wherein the gate electrode and the common electrode are formed on a same surface.

83. (Currently Amended) A liquid crystal display device comprising:

a thin film transistor over a substrate, wherein the thin film transistor includes at least a gate electrode, a semiconductor film adjacent to the gate electrode, and an electrode electrically connected to the semiconductor film;

a common electrode over the substrate;

a liquid crystal layer over the thin film transistor and the common electrode; and

a transparent conductive material comprising ITO over the liquid crystal layer, wherein the liquid crystal layer is located between the substrate and the transparent conductive material, and

wherein long axes of liquid crystal molecules in the liquid crystal layer are kept parallel with a surface of the substrate both when driving the liquid crystal display device using the thin film transistor and when not using the thin film transistor to drive the liquid crystal display device.

84. (Previously Presented) A liquid crystal display device according to claim 83 wherein the substrate comprises a glass or a quartz substrate.

85. (Previously Presented) A liquid crystal display device according to claim 83 wherein the transparent conductive material functions as an electrode.

86. (Previously Presented) A liquid crystal display device according to claim 83 wherein the gate electrode and the common electrode are formed on a same surface.

87. (Currently Amended) A liquid crystal display device comprising:

a thin film transistor over a substrate, wherein the thin film transistor includes at least a gate electrode, a semiconductor film over the gate electrode, and an electrode electrically connected to the semiconductor film;

a common electrode over the substrate;

a liquid crystal layer over the thin film transistor and the common electrode; and

a transparent conductive material over the liquid crystal layer, wherein the liquid crystal layer is located between the substrate and the transparent conductive material, and

wherein long axes of liquid crystal molecules in the liquid crystal layer are kept parallel with a surface of the substrate both when driving the liquid crystal display device using the thin film transistor and when not using the thin film transistor to drive the liquid crystal display device.

88. (Previously Presented) A liquid crystal display device according to claim 87 wherein the substrate comprises a glass or a quartz substrate.

89. (Previously Presented) A liquid crystal display device according to claim 87 wherein the transparent conductive material functions as an electrode.

90. (Previously Presented) A liquid crystal display device according to claim 87 wherein the gate electrode and the common electrode are formed on a same surface.

91. (Currently Amended) A liquid crystal display device comprising:

a thin film transistor over a substrate, wherein the thin film transistor includes at least a gate electrode, a semiconductor film over the gate electrode, and an electrode electrically connected to the semiconductor film;

a common electrode over the substrate;

a liquid crystal layer over the thin film transistor and the common electrode; and

a transparent conductive material comprising ITO over the liquid crystal layer, wherein the liquid crystal layer is located between the substrate and the transparent conductive material, and

wherein long axes of liquid crystal molecules in the liquid crystal layer are kept parallel with a surface of the substrate both when driving the liquid crystal display device using the thin film transistor and when not using the thin film transistor to drive the liquid crystal display device.

92. (Previously Presented) A liquid crystal display device according to claim 91 wherein the substrate comprises a glass or a quartz substrate.

93. (Previously Presented) A liquid crystal display device according to claim 91 wherein the transparent conductive material functions as an electrode.

94. (Previously Presented) A liquid crystal display device according to claim 91 wherein the gate electrode and the common electrode are formed on a same surface.

95. (Currently Amended) A liquid crystal display device comprising:

a thin film transistor over a substrate, wherein the thin film transistor includes at least a gate electrode, an amorphous semiconductor film adjacent to the gate electrode, and an electrode electrically connected to the amorphous semiconductor film;

a common electrode over the substrate;

a liquid crystal layer over the thin film transistor and the common electrode; and

a transparent conductive material over the liquid crystal layer, wherein the liquid crystal layer is located between the substrate and the transparent conductive material, and

wherein long axes of liquid crystal molecules in the liquid crystal layer are kept parallel with a surface of the substrate both when driving the liquid crystal display device using the thin film transistor and when not using the thin film transistor to drive the liquid crystal display device.

96. (Previously Presented) A liquid crystal display device according to claim 95 wherein the substrate comprises a glass or a quartz substrate.

97. (Previously Presented) A liquid crystal display device according to claim 95 wherein the transparent conductive material functions as an electrode.

98. (Previously Presented) A liquid crystal display device according to claim 95 wherein the gate electrode and the common electrode are formed on a same surface.

99. (Currently Amended) A liquid crystal display device comprising:

a thin film transistor over a substrate, wherein the thin film transistor includes at least a gate electrode, an amorphous semiconductor film adjacent to the gate electrode, and an electrode electrically connected to the amorphous semiconductor film;

a common electrode over the substrate;

a liquid crystal layer over the thin film transistor and the common electrode; and

a transparent conductive material comprising ITO over the liquid crystal layer, wherein the liquid crystal layer is located between the substrate and the transparent conductive material, and

wherein long axes of liquid crystal molecules in the liquid crystal layer are kept parallel with a surface of the substrate both when driving the liquid crystal display device using the thin film transistor and when not using the thin film transistor to drive the liquid crystal display device.

100. (Previously Presented) A liquid crystal display device according to claim 99 wherein the substrate comprises a glass or a quartz substrate.

101. (Previously Presented) A liquid crystal display device according to claim 99 wherein the transparent conductive material functions as an electrode.

102. (Previously Presented) A liquid crystal display device according to claim 99 wherein the gate electrode and the common electrode are formed on a same surface.